

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	20	fermentation same thiazolidine	US-PGPUB ; USPAT	OR	ON	2006/12/12 16:59
L2	35	fermentation same thiazolidine	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:08
L3	0	("2002086373").PN.	US-PGPUB ; USPAT	OR	OFF	2006/12/12 17:07
L4	1	("20020086373").PN.	US-PGPUB ; USPAT	OR	OFF	2006/12/12 17:07
L5	2892	fermentation same cysteine	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:09
L6	149	fermentation same cysteine and animal same feed	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:10
L7	16	fermentation same (liquor or broth) same cysteine and animal same feed	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:15
L8	8	fermentation same (liquor or broth) same cystine and animal same feed	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:17
L9	0	fermentation same (liquor or broth) same thiazolidine adj4 dicarboxyl\$4 and animal same feed	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/12/12 17:18

=> d 1-6 bib ab

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:612473 CAPLUS  
DN 143:131936  
TI Process for preparing L-amino acids using strains of the  
Enterobacteriaceae family overexpressing gene yodA  
IN Rieping, Mechthild  
PA Degussa A.-G., Germany  
SO PCT Int. Appl., 46 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005064001	A2	20050714	WO 2004-EP14279	20041215
	WO 2005064001	A3	20051027		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10361192	A1	20050728	DE 2003-10361192	20031224
	EP 1697531	A2	20060906	EP 2004-803898	20041215
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
PRAI	DE 2003-10361192	A	20031224		
	WO 2004-EP14279	W	20041215		

AB The invention relates to a process for fermentatively preparing L-amino acids, in particular L-threonine, in which the following steps are carried out: the microorganisms which produce the desired L-amino acid and in which the yodA ORF, for nucleotide sequences or alleles encoding its gene product, is/are potentiated, in particular overexpressed, are cultured in a medium under conditions under which the desired L-amino acid is enriched in the medium or in the cells, and the desired L-amino acid is isolated, with, where appropriate, constituents of the fermn. broth, and/or the biomass, in its entirety or in portions ( $\geq 0$  to 100%), remaining in the isolated product or being completely removed.

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:735212 CAPLUS  
DN 143:210515  
TI Preparation of L-amino acids using an Escherichia coli strain overexpressing gene yibD  
IN Rieping, Mechthild  
PA Germany  
SO U.S. Pat. Appl. Publ., 16 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005176112	A1	20050811	US 2004-794417	20040308
	DE 102004005836	A1	20050915	DE 2004-102004005836	20040206

WO 2005075627 A1 20050818 WO 2005-EP767 20050127  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

EP 1711593 A1 20061018 EP 2005-701199 20050127  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

PRAI DE 2004-102004005836 A 20040206  
 WO 2005-EP767 W 20050127

OS CASREACT 143:210515

AB The invention relates to a process for the preparation of L-amino acids by the fermentation of recombinant microorganisms of the family Enterobacteriaceae, characterized in that the microorganisms producing the desired L-amino acid in which the yibD ORF, or nucleotide sequences coding for the gene product, or alleles, is (are) enhanced and, in particular, overexpressed are cultivated in a medium under conditions in which the desired L-amino acid is enriched in the medium or in the cells, and the desired L-amino acid is isolated, constituents of the fermn. broth, and/or all or part ( $\geq 100\%$ ) of the biomass, optionally remaining in the isolated product or being completely removed.

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:611760 CAPLUS

DN 143:131934

TI Process for preparing L-amino acids using strains of the Enterobacteriaceae family overexpressing gene yaaU

IN Dusch, Nicole

PA Germany

SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005153403	A1	20050714	US 2004-17120	20041221
	DE 10361268	A1	20050728	DE 2003-10361268	20031224
	WO 2005064000	A1	20050714	WO 2004-EP14082	20041210
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

EP 1697530 A1 20060906 EP 2004-803729 20041210  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

PRAI DE 2003-10361268 A 20031224  
 US 2004-607362P P 20040907  
 WO 2004-EP14082 W 20041210

OS CASREACT 143:131934

AB The invention relates to a process for preparing L-amino acids by fermenting recombinant microorganisms of the Enterobacteriaceae family. The microorganisms are characterized by the overexpression or enhancement of the yaaU ORF. The desired L-amino acid is isolated, with, optionally, constituents of the fermn. broth, and/or the biomass remaining in the isolated product.

L5 ANSWER 4 OF 6 BIOTECHNO COPYRIGHT 2006 Elsevier Science B.V. on STN  
AN 1994:24337732 BIOTECHNO

TI Large scale, in situ isolation of periplasmic IGF-I from E. coli  
AU Hart R.A.; Lester P.M.; Reifsnnyder D.H.; Ogez J.R.; Builder S.E.  
CS Department of Recovery Sciences, Genentech Inc., 460 Pt. San Bruno  
Blvd., South San Francisco, CA 94080-4918, United States.  
SO Bio/Technology, (1994), 12/11 (1113-1117)  
CODEN: BTCHDA ISSN: 0733-222X

DT Journal; Article

CY United States

LA English

SL English

AB Human insulin-like growth factor I (IGF-I) accumulates in both folded and aggregated forms in the fermentation medium and cellular periplasmic space when expressed in E. coli with an endogenous secretory signal sequence. Due to its heterogeneity in form and location, low yield of IGF-I was obtained using a typical refractile body recovery strategy. To enhance recovery yield, a new procedure was developed to solubilize and extract IGF-I from cells while in fermentation broth. This method, called in situ solubilization, involves addition of chaotrope and reductant to alkaline fermentation broth and provides recovery of about 90% of all IGF-I in an isolated supernatant. To further enhance recovery, a new aqueous two-phase extraction procedure was developed which partitions soluble non-native IGF-I and biomass solids into separate liquid phases. This two-phase extraction procedure involves addition of polymer and salt to the solubilization mixture and provides about 90% recovery of solubilized IGF-I in the light phase. The performance of the solubilization and aqueous extraction procedures is reproducible at scales ranging from 10 to 1000 liters and provides a 70% cumulative recovery yield of IGF-I in the isolated light phase. The procedure provides significant initial IGF-I purification since most host proteins remain cell associated during solubilization and are enriched in heavy phase. ELISA analysis for E. coli proteins indicates that 97% of the protein in the light phase is IGF-I. Together, the techniques of in situ solubilization and aqueous two-phase extraction provide a new, high yield approach for isolating recombinant protein which is accumulated in more than one form during fermentation.

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:235759 CAPLUS

DN 122:88279

TI Use of crude whey by Kluyveromyces marxianus and by Yarrowia lipolytica to reduce pollution of effluents.

AU De Felice, B.; Scioli, D.

CS Dipartimento di Fisiologia generale e ambientale, Universita degli Studi di Napoli, Naples, Italy

SO Annali di Microbiologia ed Enzimologia (1994), 44(Pt. 1), 65-72  
CODEN: AMEZAB; ISSN: 0003-4649

PB Universita degli Studi di Milano

DT Journal

LA English

AB The ability of Kluyveromyces marxianus to transform whey for maximum biomass production and the ability of Yarrowia lipolytica to reduce pollution in fermentation effluent was examined Kluyveromyces marxianus, isolated from industrial wastes, was cultivated in a fermenter using

undeproteinized, undiluted, supplemented Mozzarella cheese whey. Lactose content, ethanol, biomass, and COD reduction by *Kluyveromyces marxianus* were determined. In 12 h at pH 4.5, *Kluyveromyces marxianus* gave a biomass content of 22 g/L, with a protein content of 48%. Gas chromatog. indicated formation of several volatile compds. in the fermn. broth: acetaldehyde, Et alc., n-propanol, butanol, and isoamyl alc. *Yarrowia lipolytica* was grown in the fermentation effluent after removing *Kluyveromyces* cells and effectively reduced COD in *Kluyveromyces* effluent in 48 h.

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1984:437494 CAPLUS  
DN 101:37494  
TI Protein quality of bacterial biomass (*Bac. mucilaginosus*) and  
results of its use in feeding domestic animals  
AU Wecke, Christian; Vinogradov, J. J.; Chochrin, Savva N.; Koehler,  
Rosemarie; Gebhardt, Guenter  
CS Sekt. Tierprod. Veterinaermed., Karl-Marx-Univ., Leipzig, DDR-7022, Ger.  
Dem. Rep.  
SO Wissenschaftliche Zeitschrift - Karl-Marx-Universitaet Leipzig,  
Mathematisch-Naturwissenschaftliche Reihe (1983), 32(6), 601-5  
CODEN: WZMNA8; ISSN: 0043-6860  
DT Journal  
LA German  
AB Dried biomass of *Bacillus mucilaginosus* contained 666 g dry  
matter/kg, and its lysine and methionine + cystine contents were  
41 and 17 g/kg dry weight, resp. In protein quality it was inferior to  
*Methanobacterium*, but was comparable to other bacteria and to mixed  
cultures from fermn. of wood waste, liquid manure, and sulfite  
liquor. It was an effective feed supplement in feeding expts. on  
calves, chickens, and swine.

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L9 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1984:437494 CAPLUS  
DN 101:37494  
TI Protein quality of bacterial biomass (Bac. mucilaginosus) and results of  
its use in feeding domestic animals  
AU Wecke, Christian; Vinogradov, J. J.; Chochrin, Savva N.; Koehler,  
Rosemarie; Gebhardt, Guenter  
CS Sekt. Tierprod. Veterinaermed., Karl-Marx-Univ., Leipzig, DDR-7022, Ger.  
Dem. Rep.  
SO Wissenschaftliche Zeitschrift - Karl-Marx-Universitaet Leipzig,  
Mathematisch-Naturwissenschaftliche Reihe (1983), 32(6), 601-5  
CODEN: WZMNA8; ISSN: 0043-6860  
DT Journal  
LA German  
AB Dried biomass of Bacillus mucilaginosus contained 666 g dry matter/kg, and  
its lysine and methionine + cystine contents were 41 and 17 g/kg  
dry weight, resp. In protein quality it was inferior to Methanobacterium,  
but was comparable to other bacteria and to mixed cultures from  
fermn. of wood waste, liquid manure, and sulfite liquor.  
It was an effective feed supplement in feeding expts. on calves,  
chickens, and swine.

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(FILE 'HOME' ENTERED AT 17:50:19 ON 12 DEC 2006)

FILE 'AGRICOLA, BIOSIS, BIOTECHNO, CABA, CAPLUS, DISSABS, FOMAD, FOREGE,  
FROSTI, FSTA, JICST-EPLUS, NTIS, NUTRACEUT, PASCAL, PROMT, SCISEARCH,  
TOXCENTER' ENTERED AT 17:50:55 ON 12 DEC 2006

L1	159 S (CYSTEINE OR CYSTINE OR THIAZOLIDINE) AND FERMENTATION (10A)
L2	97 DUP REM L1 (62 DUPLICATES REMOVED)
L3	2 S L2 AND ANIMAL FEED
L4	6 S L2 AND BIOMASS
L5	6 DUP REM L4 (0 DUPLICATES REMOVED)
L6	9 S L2 AND SALT
L7	9 DUP REM L6 (0 DUPLICATES REMOVED)
L8	5 S L2 AND FEED
L9	5 DUP REM L8 (0 DUPLICATES REMOVED)